

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE *****		PAGE OF PAGES 1 1	
2. AMENDMENT/MODIFICATION NO. 0002		3. EFFECTIVE DATE 03 APR 22		4. REQUISITION/PURCHASE REQ. NO. 33100 /30696633		5. PROJECT NO. (If applicable)	
6. ISSUED BY NAVAL UNDERSEA WARFARE CTR, DK 610 DOWELL ST KEYPORT WA 98345-7610 BUYER/SYMBOL: JUDITH WALLS		CODE N00253		7. ADMINISTERED BY (If other than item 6)		CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(X)		9A. AMENDMENT OF SOLICITATION NO.	
				X		N00253 03 Q 0112	
						9B. DATED (SEE ITEM 11) 03 APR 14	
						10A. MODIFICATION OF CONTRACT/ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☒ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods.

(a) By completing items 8 and 15, and returning 0 copies of the amendment; (b) By acknowledging receipt of the amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATION OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103 (b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible)

THIS AMENDMENT IS ISSUED TO ADD ATTACHMENT (B) TO DRAWING PACKAGE TO REFLECT DRAWING 2064216 SPECIFICATION AND TECHNICAL DATA CLARIFICATION AND UPDATES. ATTACHMENT (B), PAGE 1 OR 3 PAGES, FOLLOWS. BALANCE OF SOLICITATION REMAINS UNCHANGED
COPY TO: KTR, FILE

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
		JUDITH WALLS, PURCHASING COORDINATOR	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		BY <u>Judith Walls</u> (Signature of Contracting Officer)	4/22/03

Mk 48 Torpedo
TDP 16202 (2064216 Ring Assembly, Wiper)
ECP 48/NUWC-K/6688

Recommended Need for Change:

Wiper Ring Assembly drawing 2064216 is dated. Drawing revisions are required for specification updates and technical data clarifications.

Recommended Description of Change:

The following changes are being made to update specifications and clarify technical data appearing on drawing 2064216 Rev G.

a. Drawing Note 1 – Updated and revised to read as follows:

1. FIND NO. 1 MATERIAL: MOLDING COMPOUND, THERMOSETTING, PHENOLIC RESIN: CELLULOSE FILLED, TYPE CFG (GENERAL PURPOSE WOOD-FLOUR-FILLED), PER ASTM D 5948. COLOR: BLACK.

Notes:

1. MIL-M-14H and associated Specification Sheet MIL-M-14/1 were canceled on 11 Oct 96. Replacement Standard is identified as ASTM D 5948.
2. Paragraph 4.1 in currently active ASTM D 5948-96 reads as follows: "This specification is a revision of STD MIL-M-14H, Specification for Molding Compound, Thermosetting, retaining the MIL-M-14H material designations and property requirements while conforming to ASTM form and style. It is intended for qualification and batch acceptance for materials used by government and industry, and is intended as a direct replacement for MIL-M-14H."

b. Drawing Note 2 – Updated and revised to read as follows:

2. FIND NUMBER 2 AND FIND NUMBER 3 MATERIAL: COPPER, SHEET OR STRIP, ELECTROLYTIC TOUGH PITCH (ETP), UNS C11000, .0070 OR .0100 NOMINAL THICKNESS, PER ASTM B 152/B 152M.

Notes:

1. Historical review of Note 2 shows the following:
 - a) Revisions "Original Issue" (28 Apr 71) thru "C" (17 Feb 76) identify use of .0070 nominal thickness copper "Foil" material in "Sheet" form per MIL-F-55561 (Foil, Copper, Cladding for Printed Wiring Boards), Type II (Rolled), Class I ($\pm 10\%$ Tolerance by Weight).
 - b) Revisions "D" (7 May 82) and "E" (30 Jan 85) identify use of the following:
 - b.1) .0070 or .0098 nominal thickness copper "Foil" material in "Sheet" form per MIL-F-5556, Type II, Class I.
 - b.2) Alternate material specification ASTM B152-81 (Standard Specification for Copper Sheet, Strip, Plate, and Rolled Bar), C11000 (ETP), 99.9% Copper.
 - c) Revisions "F" (21 May 86) and current Revision "G" (2 Sep 87) identify use of .007 thick copper "Foil" or .010 thick "Strip" per ASTM B 152-84, C11000 (ETP), 99.9% Copper.
2. Currently active revision of ASTM B 152 is ASTM B 152/B 152M – 00. Paragraph 13.1 reads, in part: "The dimensions and tolerances for material covered by this specification shall be as prescribed in the current edition of Specification B 248."
3. ASTM B 248 – 01 (Standard Specification for Copper Sheet, Strip, Plate, and Rolled Bar) is currently active. Note the following:
 - a) Non-mandatory information Appendix X.1 provides preferred thicknesses for uncoated wrought copper and copper alloy plate, sheet, strip, and rolled bar - under .250 inches thick. .007 and .010 material thicknesses, shown in existing drawing Note 2, are listed in Appendix X1.

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- b) ASTM B 152/B 152M thickness tolerances are provided in Table 1. Tolerances are provided for .007 thick Strip and for .010 thick Sheet and Strip. All tolerances are shown to four decimal places.
4. Drawing Note 2 updated/revised to require:
- Copper, Electrolytic Tough Pitch (ETP), UNS C11000, per ASTM B 152/B 152M.
 - Material Form: Sheet or Strip.
 - Thickness: .0070 or .0100 inch (Note: Paragraph 2.2 in USASI Y14.5-1966 (Dimensioning and Tolerancing for Engineering Drawings) requires decimal dimensions to be specified to the same number of decimal places as their associated tolerances. See paragraph e. below.)
- c. Drawing Note 5 – Updated and revised to read as follows:
5. METAL PLATE EXPOSED SURFACES OF ITEMS 2 & 3 IN THE FOLLOWING SEQUENCE:
- NICKEL PLATE .0003 - .0005 THICK PER SAE AMS-QQ-N-290, CLASS 1 (ELECTRODEPOSITED CORROSION PROTECTIVE PLATING).
 - GOLD PLATE (OVER NICKEL PLATING) PER ASTM B 488, TYPE I, ASTM CODE C, CLASS .508 (.00002 INCH) THICKNESS.

Notes:

- Existing drawing Note 5.A requires Nickel Plating (Electrodeposited) per QQ-N-290, Class 1. QQ-N-290A was cancelled on 3 May 01. Replacement Specification is identified as SAE AMS-QQ-N-290. "Notice" for SAE AMS-QQ-N-290 (Jul 00) reads, in part: "This document has been taken directly from U.S. Military Specification QQ-N-290A and contains only minor editorial and format changes required to bring it into conformance with the publishing requirements of SAE technical standards." Drawing Note 5.A updated to require Nickel Plating per SAE AMS-QQ-N-290, Class 1.
- Existing drawing Note 5.B requires Gold Plating IAW MIL-G-45204, Type I (99.7 % gold minimum), Class 00 (.00002 inch thick, minimum), Grade C (Knoop Hardness 130 – 200, inclusive). MIL-G-45204C was canceled by Notice 1 on 7 Apr 98. Replacements are identified as SAE AMS 2422 (Plating, Gold) or ASTM B488 (Standard Specification for Electrodeposited Coatings of Gold for Engineering Uses). Note the following:
 - SAE AMS 2422E does not provide direct Type, Class and Grade replacements for existing drawing specified MIL-G-45204C requirements.
 - ASTM B 488-01 paragraphs 4.2.1 and 4.2.3 provide the following cross-references to MIL-G-45204:

Parameter	MIL-G-45204	ASTM B 488
<u>Mass Percent Gold</u> 99.7 % Minimum	Type I	Type I
<u>Hardness</u> Knoop Hardness Range 130 – 200 HK ₂₅	Grade C	Code C

- c) MIL-G-45204C controls gold plating thickness by use of a "Class" number. Paragraph 4.3 in ASTM B 488-01 requires thickness to be specified by a "Class" number consisting of Arabic numerals that designates the minimum linear thickness in micrometers. Conversion of current drawing required .00002 inch minimum thickness (MIL-G-45204, Class 00) to micrometers is as follows:

.00002 inches	2.540 em	10 mm	1000 microns	
	inch	em	mm	= .508 microns (micrometers)

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Existing drawing Note 5.B revised to show gold thickness in both micrometers (Class .508) and inches (.00002 inch).

- d. Drawing Note 6 – Corrected to read as follows:
 - 6. INTERPRET DRAWING IAW MIL-STD-100A.
- e. New drawing Note 7 added to read as follows:
 - 7. INTERPRET DIMENSIONING AND TOLERANCING IAW USASI Y14.5-1966.
- f. Drawing Zone A/8 – “(WR-43)” updated to “(DOD-STD-2101 (OS)).”